

AMENDMENTS TO THE CLAIMS

Please cancel claims 2 and 64-98, without prejudice.

1. (Currently Amended) A chromatographic material comprising:

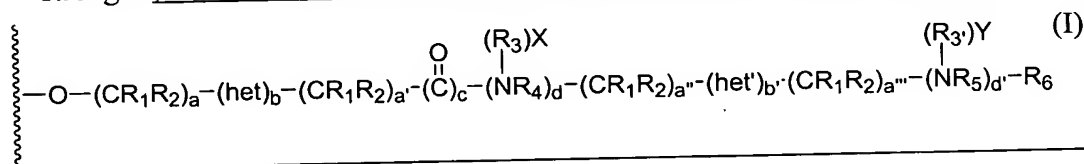
- (a) a terminal binding functionality;
- (b) a hydrophobic linker comprising at least one functionality that is different from the terminal binding functionality; and
- (c) a solid support,

wherein

the hydrophobic linker links the terminal binding functionality to the solid support;

and

the chromatographic material is capable of binding bovine albumin at physiological ionic strength, wherein the chromatographic material has the following general formula I:



wherein

R₁, R₂, R₄, and R₅, at each occurrence, are independently selected from the group consisting of H, C₁₋₆-alkyl, C₁₋₆-alkoxy, C₁₋₆-alkyl-C₁₋₆-alkoxy, aryl, C₁₋₆-alkaryl, -NR'C(O)R'', -C(O)NR'R'', and hydroxy,

wherein R' and R'' are independently selected from C₁₋₆-alkyl, and

wherein no more than one of R₁ and R₂ is hydroxy;

R₆ is selected from the group consisting of H, C₁₋₆-alkyl, aryl, C₁₋₆-alkaryl, -C(O)OH, -S(O)₂OH, and -P(O)(OH)₂;

R₃ and R_{3'}, together with X and Y, respectively, may independently be absent or present,

and if present, then R₃ and R_{3'} are independently selected from the group consisting of

H, C₁₋₆-alkyl, C₁₋₆-alkoxy, C₁₋₆-alkyl-C₁₋₆-alkoxy, aryl, and C₁₋₆-alkaryl,

wherein X and Y, independently of each other, represent anions;

het and het' are heteroatom moieties independently selected from the group consisting

of -O-, -S-, -S(O)-, and -S(O)₂-;

a, a', a'', and a''' are independently selected from the integers 0 through 6;

b and b' are independently 0 or 1;
c is 0 or 1, and if c is 1, then (R₃)X is absent;
d and d' are independently 0 or 1; and
the wavy line represents the solid support.

2. (Canceled)
3. (Currently Amended) The chromatographic material according to claim ~~[[2]]~~ 1, wherein at least one of a, a', a'', and a''' is 2.
4. (Original) The chromatographic material according to claim 3, wherein at least two of a, a', a'', and a''' are 2.
5. (Original) The chromatographic material according to claim 4, further wherein at least one of a, a', a'', and a''' is 3.
6. (Currently Amended) The chromatographic material according to claim ~~[[2]]~~ 1, wherein at least one of a, a', a'', and a''' is 3.
7. (Original) The chromatographic material according to claim 6, wherein at least two of a, a', a'', and a''' are 3.
8. (Original) The chromatographic material according to claim 6, wherein a is 3.
9. (Original) The chromatographic material according to claim 8, wherein het is S and b is 1.
10. (Original) The chromatographic material according to claim 9, wherein a' is selected from the group consisting of 2, 3, 4, 5, and 6.
11. (Original) The chromatographic material according to claim 10, wherein b' is 0.

12. (Original) The chromatographic material according to claim 11, wherein c and d are both 0.

13. (Original) The chromatographic material according to claim 12, wherein d' is 1 and (R_{3'})Y is absent.

14. (Original) The chromatographic material according to claim 12, wherein d' is 1 and (R_{3'})Y is present.

15. (Original) The chromatographic material according to claim 12, wherein d' is 0.

16. (Original) The chromatographic material according to claim 11, wherein c is 1 and d is 1.

17. (Original) The chromatographic material according to claim 16, wherein d' is 1 and (R_{3'})Y is absent.

18. (Original) The chromatographic material according to claim 16, wherein d' is 1 and (R_{3'})Y is present.

19. (Original) The chromatographic material according to claim 16, wherein d' is 0.

20. (Original) The chromatographic material according to claim 10, wherein R₁ and R₂ are independently selected from H and C₁₋₆-alkyl.

21. (Original) The chromatographic material according to claim 20, wherein each of R₁ and R₂ are H.

22. (Original) The chromatographic material according to claim 8, wherein d' is 1.

23. (Original) The chromatographic material according to claim 22, wherein R_{3'}, R₅, and R₆ are independently selected from the group consisting of H, C₁₋₆-alkyl, aryl, and C₁₋₆-alkaryl.

24. (Original) The chromatographic material according to claim 23, wherein R_3 , R_5 , and R_6 are independently selected from C_{1-6} -alkyl and aryl.
25. (Original) The chromatographic material according to claim 24, wherein R_3 , R_5 , and R_6 are independently selected from C_{1-6} -alkyl.
26. (Original) The chromatographic material according to claim 25, wherein R_3 , R_5 , and R_6 are independently selected from methyl and ethyl.
27. (Original) The chromatographic material according to claim 24, wherein one of a'' and a''' is 1 and the other is 1 or 2.
28. (Original) The chromatographic material according to claim 25, wherein $(R_3)Y$ is absent.
29. (Original) The chromatographic material according to claim 8, wherein d' is 0.
30. (Original) The chromatographic material according to claim 29, wherein R_6 is H, C_{1-6} -alkyl, aryl, or C_{1-6} -alkaryl.
31. (Original) The chromatographic material according to claim 30, wherein R_6 is selected from C_{1-6} -alkyl and aryl.
32. (Original) The chromatographic material according to claim 31, wherein R_6 is phenyl.
33. (Original) The chromatographic material according to claim 31, wherein one of a'' and a''' is 1 and the other is 1 or 2.
34. (Original) The chromatographic material according to claim 29, wherein R_6 is $-C(O)OH$, $-S(O)_2OH$, and $-P(O)(OH)_2$.

35. (Original) The chromatographic material according to claim 34, wherein one of a'' and a''' is 1 and the other is 1 or 2.
36. (Currently Amended) The chromatographic material according to claim ~~[[2]]~~ 1, wherein:
a is 3;
 a' is 2;
b is 1; and
each R_1 and R_2 in $(CR_1R_2)_a$ and $(CR_1R_2)_{a'}$ is H, except that one of R_2 in $(CR_1R_2)_a$ is optionally OH.
37. (Original) The chromatographic material according to claim 36, wherein one of R_2 in $(CR_1R_2)_a$ is OH.
38. (Original) The chromatographic material according to claim 37, wherein each of a'' , a''' , and b' is 0.
39. (Currently Amended) The chromatographic material according to claim ~~[[2]]~~ 1, wherein:
 a'' is 3;
 a''' is 2;
 b' is 1; and
each R_1 and R_2 in $(CR_1R_2)_{a''}$ and $(CR_1R_2)_{a'''}$ is H, except that one of R_2 in $(CR_1R_2)_{a''}$ is optionally OH.
40. (Original) The chromatographic material according to claim 39, wherein one of R_2 in $(CR_1R_2)_{a''}$ is OH.
41. (Original) The chromatographic material according to claim 40, wherein each of a , a' , and b'' is 0.
42. (Original) The chromatographic material according to claim ~~[[2]]~~ 1, wherein:
a is 3;
 a' is 3;
b is 1; and

each R_1 and R_2 in $(CR_1R_2)_a$ and $(CR_1R_2)_{a'}$ is H.

43. (Original) The chromatographic material according to claim 42, wherein each of a'' , a''' , and b' is 0.

44. (Original) The chromatographic material according to claim [[2]] 1, wherein:

a'' is 3;

a''' is 3;

b' is 1; and

each R_1 and R_2 in $(CR_1R_2)_{a''}$ and $(CR_1R_2)_{a'''}$ is H.

45. (Original) The chromatographic material according to claim 44, wherein each of a , a' , and b is 0.

46. (Currently Amended) The chromatographic material according to claim [[2]] 1, wherein

a is 3;

a' is 5;

b is 1; and

each R_1 and R_2 in $(CR_1R_2)_a$ and $(CR_1R_2)_{a'}$ is H.

47. (Original) The chromatographic material according to claim 46, wherein:

b' is 0;

one of a'' and a''' is 2 or 3, the other being 0; and

each R_1 and R_2 in $(CR_1R_2)_{a''}$ and $(CR_1R_2)_{a'''}$ is H, except that one of R_2 in $(CR_1R_2)_{a''}$ and $(CR_1R_2)_{a'''}$ is optionally OH.

48. (Original) The chromatographic material according to claim 47, wherein a'' or a''' is 3 and one of R_2 in $(CR_1R_2)_{a''}$ and $(CR_1R_2)_{a'''}$ is OH.

49. (Currently Amended) The chromatographic material according to claim [[2]] 1, wherein

a or a' is 3, the other being 0;

a'' or a''' is 3;

each of b, b', and c is 0; and
d is 1.

50. (Original) The chromatographic material according to claim 49, wherein d' is 1.

51. (Currently Amended) The chromatographic material according to claim [[2]] 1, wherein:

each of R₁ and R₂ are H;

R₃, R₃', R₄, R₅, and R₆ are independently selected from the group consisting of H, C₁-₆-alkyl, aryl, and C₁₋₆-alkaryl;

het is S;

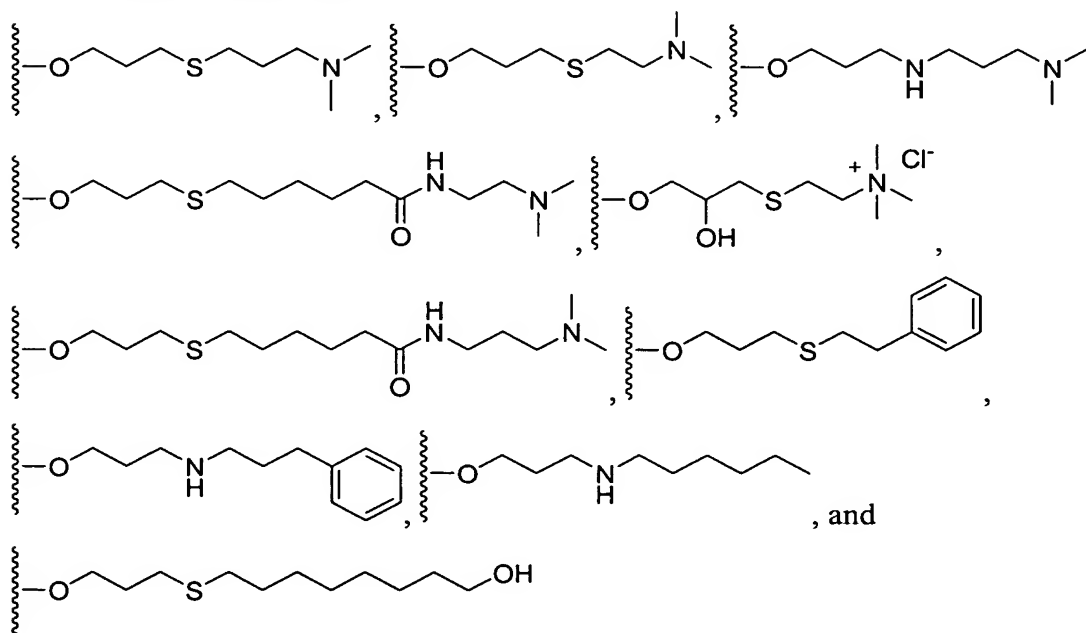
a is 3;

a' is selected from the group consisting of 2, 3, 4, 5, and 6;

one of a'' and a''' is 1 and the other is 1 or 2; and

b is 1 and b' is 0.

52. (Currently Amended) The chromatographic material according to claim [[2]] 1, selected from the group consisting of:



53. (Original) The chromatographic material according to claim 1, wherein the solid support is an organic material.

54. (Original) The chromatographic material according to claim 53, wherein the organic material is one selected from the group consisting of cellulose, agarose, dextran, polyacrylates, polystyrene, polyacrylamide, polymethacrylamide, copolymers of styrene and divinylbenzene, and mixtures thereof.

55. (Original) The chromatographic material according to claim 1, wherein the solid support is an inorganic material.

56. (Original) The chromatographic material according to claim 55, wherein the inorganic material is one selected from the group consisting of silica, zirconia, alumina, titania, ceramics, and mixtures thereof.

57. (Original) The chromatographic material according to claim 1, wherein the solid support is in the form of a bead or particle.

58. (Original) The chromatographic material according to claim 1, wherein the solid support is a planar solid support.

59. (Original) The chromatographic material according to claim 58, wherein the chromatographic material is in the form of a biochip.

60. (Original) The chromatographic material according to claim 59, wherein the solid support is selected from the group consisting of a metal, metal oxide, silicon, glass, a polymer, and a composite material.

61. (Original) The chromatographic material according to claim 59, wherein a multitude of terminal binding functionalities and the hydrophobic linkers to which the terminal binding functionalities are linked are segregated into a plurality of addressable locations on the solid support.

62. (Original) The chromatographic material according to claim 59, wherein the biochip is a mass spectrometer probe.

63. (Original) The chromatographic material according to claim 61, wherein at least two different addressable locations comprise the same terminal binding functionality and hydrophobic linker.

Claims 64-98 (Canceled)

Please add the following claims.

99. (New) The chromatographic material of claim 1, wherein

R₁, R₂, R₄, and R₅, at each occurrence, are independently selected from the group consisting of H, C₁₋₆-alkyl, C₁₋₆-alkoxy, C₁₋₆-alkyl-C₁₋₆-alkoxy, -NR'C(O)R'', -C(O)NR'R'', and hydroxy,

wherein R' and R'' are independently selected from C₁₋₆-alkyl, and

wherein no more than one of R₁ and R₂ is hydroxy; and,

R₆ is selected from the group consisting of H, C₁₋₆-alkyl, -C(O)OH, -S(O)₂OH, and -P(O)(OH)₂.

100. (New) The chromatographic material of claim 1, wherein

R₆ is selected from the group consisting of C₁₋₆-alkyl, -C(O)OH, -S(O)₂OH, and -P(O)(OH)₂.